



Construction and Development in Floodplains

July 2001

Seattle's Floodplain Development Ordinance (Seattle Municipal Code, Chapter 25.06) imposes standards and restrictions on construction and development in designated floodplain areas in the City of Seattle. The areas affected by the regulations are located along Thornton Creek and Pipers Creek in North Seattle, along Longfellow Creek in West Seattle, and in the South Park area along the Duwamish Waterway. The flood regulations create permit requirements with which owners of property in the designated areas should be familiar.

How to Determine whether Property Is in a Designated Floodplain

Seattle areas affected by the Floodplain Development Ordinance are shown in detailed maps prepared by the Federal Emergency Management Agency (FEMA). The maps — called Flood Insurance Rate Maps — were originally prepared in 1988 for FEMA as part of the federal Flood Insurance Study conducted by a local engineering firm.

Copies of the most recent (1995) versions of the maps are available for inspection at the DCLU Public Resource Center, located on the 20th floor of Key Tower at 700 Fifth Avenue, (206) 684-8467. The maps may also be purchased from the FEMA Map Service Center at (800) 358-9616.

To make it easier to determine whether a particular piece of property is located in a designated floodplain, DCLU includes flood-prone areas on its environmentally critical areas (ECA) maps. ECA regulations define flood-prone areas as those areas that would likely be covered with or carry water as a result of a 100 year

storm, or that would have a 1% or greater chance of being covered with or of carrying water in any given year based on current circumstances or maximum development permitted under existing zoning. This includes areas identified on the Seattle Floodplain Development ordinance FEMA maps, streams identified by the Washington State Department of Fisheries' *Catalog of Washington Streams*, and areas with drainage problems known to the Seattle Public Utilities (SPU).

A person wishing to determine whether his or her property is located in a designated floodplain should first check DCLU's ECA maps. The FEMA (Flood Insurance Rate) maps may then be reviewed for more detailed information.

Owners disputing the designation of their property as being within a floodplain area can apply for a "Letter of Map Amendment" by calling the FEMA Map Assistance Center at (877) 336-2627.

Permit Requirements for Construction or Development in Designated Floodplains

Before construction or development is begun on private property in a designated floodplain, a permit or a license must first be obtained from DCLU for the work. Construction or development in a floodplain area requiring DCLU approval includes subdivisions, buildings, structures, some types of landscaping, paving or grading of any kind.

For construction or development work which requires some other permit — such as a Master Use, building, electrical or grading permit — the floodplain review will be done automatically as a component of the other permit. No separate application or permit is required, although an additional fee must be paid.

For construction or development work which does not require some other permit, DCLU will issue a **Floodplain Development License** for approved work in a floodplain area. A fee will be required for the license. Before enactment of the Floodplain Development Ordinance in March of 1989, the City did not require that a property owner get a Floodplain Development License in order to do work in a designated floodplain.

Persons interested in determining whether their proposed project requires floodplain approval should review DCLU **Director's Rule 8-89**, which explains Floodplain Development Ordinance exceptions. Copies of the Director's Rule may be obtained from DCLU's Public Resource Center, located on the 20th floor of Key Tower at 700 Fifth Avenue, or from DCLU's website at www.ci.seattle.wa.us/dclu/codes.

Types of Work that May Not Need Other Permits but that Require a Floodplain Development License

The following types of activity are examples of development that may not need some other permit but must have a Floodplain Development License if they occur within one of the designated floodplain areas.

(Permits may be required if the work is to occur in another environmentally critical area.) This list is not meant to be a comprehensive list of types of development which require the license.

- construction or removal of a **STORAGE SHED** with roof area of less than 120 square feet
- construction or removal of a **FENCE** or **WALL** less than 8 feet in height
- construction or removal of a **RETAINING WALL** or **ROCKERY** less than 4 feet in height
- pouring a **CONCRETE SLAB ON GRADE** or **DRIVEWAY**
- **GRADING WORK** of any type or amount
- installation of **PLAYGROUND EQUIPMENT**
- some types of **LANDSCAPING WORK** in a floodplain area (see DCLU's Director's Rule 13-92 for landscaping standards)

Standards for Construction or Development in Designated Floodplains

In order to obtain approval for any development or construction in a designated floodplain area, the owner must demonstrate that the proposed construction or grading meets the standards of the Floodplain Development Ordinance (Seattle Municipal Code, Ch. 25.06). Copies of the Floodplain Development Ordinance are available online at the Seattle City Clerk's website at <http://clerk.ci.seattle.wa.us/~public/code1.htm>.

Property owners should refer to the ordinance itself or should contact DCLU for specific standards that apply to their proposed project. Generally, the standards and requirements can be summarized as follows:

- Lowest floor of residential structures must be elevated to 2 feet above the 100-year flood level;
- Lowest floor of nonresidential structures must be elevated or floodproofed to 2 feet above the 100 year flood level;
- Structures and utilities must be designed and constructed to be resistant to flood damage; and
- Construction and grading may not occur in designated **floodways** unless certified by an engineer that they will not result in an increase in flood levels.

Applying for Approval of Construction or Development in a Designated Floodplain

A property owner who wishes to do construction or development in a designated floodplain may apply for approval at DCLU's Applicant Services Center, located on the 20th floor of Key Tower at 700 Fifth Avenue, (206) 684-8850. Attached to this Client Assistance Memo is a **FLOODPLAIN DEVELOPMENT CHECK-LIST** of application materials generally required for development in floodplain areas.

Owners wishing to apply for a Floodplain Development License generally only need to provide the materials described in items 1, 3 and 7. Owners who seek floodplain development approval as a component of a Master Use, Building, Grading or other DCLU permit may need to provide all of the items listed, depending on the nature of the project.

Getting Answers to Questions about Floodplain Approvals

Questions about the Floodplain Development Ordinance or the requirements for floodplain development approvals should be directed to a DCLU Land Use Planner or Permit Specialist at (206) 684-8850.

For information about the FEMA National Flood Insurance Program call (800) 427-4661.

PLEASE NOTE: DCLU public information documents should not be used as substitutes for codes and regulations. Details of your project should be reviewed for specific compliance by DCLU staff.

Floodplain Development Intake Checklist

The following items must generally be included in application materials for approval of development in a designated floodplain or floodway:

- 1.____ Plot plan showing FLOODPLAIN and FLOODWAY boundaries, if applicable, and location of all development, including structures, existing and proposed. Refer to CAM 103 for requirements for basic plot plans.
 - 2.____ If structures are to be constructed or substantially improved, an elevation survey prepared by a licensed surveyor showing:
 - a. BASE FLOOD ELEVATIONS, if available in the Floodplain Maps or Study;
 - b. ELEVATION of lowest floor, including basement, of all structures;
 - c. ELEVATION to which structure is or will be floodproofed.
 - 3.____ Description of any watercourse alteration included in development
 - 4.____ Federal and/or State approvals obtained by applicant (U.S. Corps of Engineers, State Hydrological approval [HPA], Department of Fisheries)
 - 5.____ Plans showing technical data concerning design and construction to avoid flood damage (see sections 100 through 130 of Floodplain Development Ordinance)
 - 6.____ Certification of registered professional architect or engineer if plans include the following:
 - a. Any portion of structure is FLOODPROOFED;
 - b. Structure includes fully enclosed areas below lowest floor and minimum criteria of section 110(a)(2) for equalizing hydrostatic forces not met;
 - c. Any development encroaches on floodway.
 - 7.____ Floodplain Development Fee
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